

CLAIMS

What is claimed is:

1 1. A workflow management device comprising:
2 a communications interface configured to receive a user request
3 comprising one or more user-desired product properties to achieve a user-desired
4 product, the interface further configured to communicate with one or more
5 devices located external of the workflow management device;

6 a storage device configured to store data for processing the user request;
7 and

8 processing circuitry configured to process the user request using the data
9 to produce a transformed user request, the transformed user request including
10 information for automatically organizing workflow to process the one or more
11 user-desired product properties to achieve the user-desired product.

1 2. The device of claim 1, wherein the transformed user request is
2 received by a controller configured to control the workflow to perform the one or
3 more user-desired product properties.

1 3. The device of claim 2, wherein the transformed request comprises
2 additional information to process the user request in accordance with
3 specifications of the user, and the additional information comprises information
4 to route and process the one or more user-desired product properties, and
5 information to prioritize processing of the one or more user-desired product
6 properties.

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8 4. The device of claim 1, wherein the user request is received in a job
9 definition format (JDF).

1 5. The device of claim 1, wherein the interface is configured to
2 receive the user request via the Internet.

1 6. The device of claim 1, wherein the data comprises instructions
2 written in Extensible Stylesheet Language.

1 7. The device of claim 1, wherein the processing circuitry is an XSLT
2 processor.

1 8. The device of claim 1, wherein the processing circuitry applies XSL
2 transformation to the user request to produce the transformed user request.

1 9. The device of claim 1, wherein the data is stored in a stylesheet
2 within the storage device, and the stylesheet comprises instructions written in
3 an XSL format.

1 10. A workflow processing device comprising:
2 a stylesheet having defined rules for processing a user request; and
3 processing circuitry configured to receive the user request, load the
4 defined rules, and execute the defined rules to create a transformed request, and
5 wherein the transformed request comprises instructions to automatically
6 organize workflow to efficiently process the user request.

1 11. The device of claim 10, wherein the user request comprises one or
2 more user-desired product properties, and wherein the transformed request
3 comprises information to process the user request.

1 12. The device of claim 10, wherein the user request is received in a
2 job definition format (JDF).

1 13. The device of claim 10, wherein the defined rules comprise
2 instructions written in Extensible Stylesheet Language.

1 14. The device of claim 10, wherein the processing circuitry applies
2 XSL transformation to the user request to produce the transformed request.

1 15. A workflow management system for managing workflow in a
2 printing system, comprising:

3 one or more devices configured to process a user request, the one or
4 more devices communicatively coupled to a communications medium; and

5 a workflow management device comprising:

6 a communications interface configured to receive the user request, the
7 interface further configured to communicate with the one or more devices
8 located external of the workflow management device;

9 a storage device configured to store rules data for processing the user
10 request, the user request comprising one or more user-desired product
11 properties; and

12 processing circuitry configured to process the request using the rules data
13 and produce a transformed request, the transformed request comprising
14 information for automatically organizing workflow through the system to process
15 the one or more user-desired product properties to produce a user-desired
16 product.

1 16. The system of claim 15, further comprising:

2 a controller configured to receive the transformed request and assign the
3 one or more user-desired product properties to the one or more devices for
4 processing using information from the transformed request.

1 17. The system of claim 15, wherein the user request is received in a
2 job definition format (JDF).

1 18. The system of claim 15, wherein the rules data comprise
2 instructions written in Extensible Stylesheet Language.

1 19. The system of claim 15, wherein the processing circuitry applies
2 XSL transformation to the user request to produce the transformed request.

1 20. A workflow assignment method comprising:

2 receiving a user request, the request having one or more user-desired
3 product properties;
4 creating a stylesheet having defined rules for processing the user request;
5 loading the defined rules and the user request into a processing circuitry
6 configured to process the user request; and
7 executing the defined rules to create a transformed user request, the
8 transformed user request comprising additional information to automatically
9 organize workflow to process the one or more user-desired product properties to
10 produce a user-desired product.

1 21. The method of claim 20, further comprising:
2 receiving the transformed user request in a controller; and
3 controlling the workflow to process the one or more user-desired product
4 properties using information from the transformed user request.

1 22. The method of claim 20, wherein the receiving comprises receiving
2 the user request in a job definition format (JDF).

1 23. The method of claim 20, wherein the creating comprises creating
2 the stylesheet in XSL format having instructions written in Extensible Stylesheet
3 Language.

1 24. The method of claim 22, wherein the receiving further comprises
2 receiving the user request via the Internet.

1 25. The method of claim 20, wherein the loading and the executing are
2 performed by an XSLT processor.

1 26. The method of claim 20, wherein the creating the transformed user
2 request comprises applying the defined rules and using XSL transformation to
3 the user request, and the transformed user request comprise definition of
4 workflow tasks to be performed, settings and properties for the workflow tasks,

5 and one or more user-desired product properties to produce a user-desired
6 product.

1 27. A method of managing workflow in a printing system, comprising:
2 receiving a user request having one or more user-desired product
3 properties in a first processor;
4 generating a document with the one or more user-desired product
5 properties;
6 defining a set of rules using which the document is processed; and
7 processing the document using the defined set of rules to create a
8 modified document, the modified document having instructions to organize
9 workflow to perform the one or more user-desired product properties to produce
10 a user-desired product.

1 28. The method of claim 27, further comprising:
2 transmitting the modified document to a second processor configured to
3 route the workflow to process the user request having the one or more user-
4 desired product properties using instructions from the modified document.

1 29. The method of claim 27, wherein the instructions comprise
2 instructions to assemble the workflow, and instructions to decide how the one
3 or more user-desired product properties should be processed through the printing
4 system.

1 30. A workflow assignment system comprising:
2 means for receiving a user request, the request having one or more user-
3 desired product properties;
4 means for creating a stylesheet having defined rules for processing the
5 user request;
6 means for loading the defined rules and the user request into a processing
7 means configured to process the user request; and
8 means for executing the defined rules to create a transformed user
9 request, the transformed user request comprising additional information to

10 organize workflow to perform the one or more user-desired product properties to
11 produce a user-desired product.

1 31. An article of manufacture comprising:
2 processor-usable media embodying programming configured to cause a
3 processing circuitry of a workflow management device to:
4 receive a user request, the request having one or more user-desired
5 product properties;
6 create a stylesheet having defined rules for processing the user
7 request;
8 load the defined rules and the user request into a processing
9 circuitry configured to process the user request; and
10 execute the defined rules to create a transformed user request, the
11 transformed user request comprising additional information to organize workflow
12 to perform the one or more user-desired product properties to produce a user-
13 desired product.